

REMARKS/ARGUMENTSRejections

Claims 1-14 were pending in the present application. By virtue of this response, Claims 2 and 7 are cancelled and Claims 1, 5, 6, 8, 10 amended and new dependent Claims 15-18 added. Accordingly, Claims 1, 3-6, and 8-18 are currently under consideration.

Claims 1-2, 4-6 and 10 stand rejected under 35 USC §102(b) as anticipated by Montgomery. The remaining claims stand rejected under 35 USC §103 as unpatentable over Montgomery in view of Court (Claims 3 and 8) and Bond et al. (Claims 11-14.)

Specifically as regards to Montgomery, the Examiner states in pertinent part in rejecting Claim 1 (see Office Action top of page 4) that Montgomery discloses “wherein the predetermined part of the modified signal is not recorded by particular video recorders [Montgomery ‘168: col. 16, lines 12-19; ...] (see Note B below).”

The Examiner states in his Note B at page 4:

Note B- The predetermined part of the modified signal in the Montgomery ‘168 disclosure is the upper vestigial chrominance sideband of a video signal. Since particular video recorders record the baseband of the video signal, it is inherent that the vestigial sideband of Montgomery ‘168 are not recorded by said particular video recorders.

In rejecting each of the other independent Claims 5, 6, and 10, the Examiner refers to Note B and further states (see page 5) “Vestigial sidebands are read as inherently not recordable by particular video recorders.”

Rejections Traversed - Claims 2 and 7

First, the Examiner rejected dependent Claims 2 and 7. In rejecting Claim 2 the Examiner stated in pertinent part on page 4 of the Action “Montgomery ‘168 teaches that the

predetermined part is in a blanking interval of the video signal (Montgomery '168: col. 16, lns. 20, 27; col. 18, lns. 21-23)." The Examiner rejected Claim 7, which is similar to Claim 2, on similar grounds.

This rejection of original Claims 2 and 7 is traversed. These claims recite that the predetermined part of the video signal is "in a blanking interval of the video signal." It is respectfully submitted that if anything, Montgomery teaches away from this feature and instead teaches putting the data only in the active portion of the video signal. See for instance under the Field of the Invention in Montgomery, at col. 1, beginning line 14:

This invention relates to transmitting two signals on one communication channel and more particularly transmitting data during the active video portion of a video signal. (emphasis added.)

The same concept is repeated immediately under Summary of the Invention at col. 1, beginning line 59 of Montgomery:

These and other objects are achieved through the use of transmission of secondary data during the active primary video interval when pixel information is being transmitted rather than during the horizontal or vertical sync blanking intervals. (emphasis added.)

Montgomery repeats this at col. 6, beginning line 1:

In higher data rate transmission systems, a video analyzer 40 may also be included. The video analyzer 40 includes a digital signal processor that analyzes the active portion of the video signal for information representing a group of pixels in a line representing a sharp transition. (emphasis added.)

To emphasize that there is no intention of Montgomery inserting the data in the blanking intervals, see also Montgomery col. 6, beginning line 29:

The result at the output of the summer 70 is that the primary video signal and the data are frequency interleaved. In addition, the combined signal from the summer 70 still has the same type of

blanking intervals found in the standard NTSC signal. (emphasis added.)

Thus Montgomery clearly teaches putting the data only in the active video and avoiding putting it in the blanking intervals. Hence the rejection of original Claim 2 and Claim 7 is traversed.

Therefore the subject matter of Claims 2 and 7 is allowable over Montgomery. Applicant has amended Claim 1 here to include the subject matter of original dependent Claim 2, now cancelled. Thus Claim 1 as amended clearly distinguishes over Montgomery which teaches away from this feature. The same is true of Claim 6 which has been amended to include the subject matter of original Claim 7, now cancelled, and which for at least the same reason distinguishes over Montgomery.

The remaining claims dependent upon Claim 1 and Claim 6 are allowable at least for their dependency upon the base claim.

Rejections Traversed - Claims 3 and 8

The Examiner also rejected original Claim 3, dependent upon Claim 1, under § 103. The Examiner admitted on page 8 of his Action in rejecting Claims 3 and 8 that:

However, Montgomery '168 does not explicitly teach that the predetermined part is below a selected voltage level.

Court '519 teaches a television communication secrecy technique in which the video carrier suppressed for a "predetermined part" of the video in which data is to be hidden [Court '519: col. 26, lns. 40-61]. This implies modifying and specifically reducing the voltage level of the video signal.

This rejection of Claims 3 and 8 citing Court in combination with Montgomery is also traversed. First, the Examiner admits that Montgomery by itself does not teach this feature. Montgomery heavily emphasizes the use of the vestigial sidebands, see the Examiner's Note B. There is no suggestion in Montgomery to change his method of inserting the data into the video signal to be other than in the vestigial sidebands. The motivation suggested by the Examiner to

modify Montgomery with Court at page 8 of his Action is that “The motivation to accomplish said combination is suggested by Court ‘519 which teaches that additional security by is provided by selectively suppressing the video carrier [Court ‘519, col. 2, lns. 18-23].” However, there is no indication that Court could be used in combination with the Montgomery method of using the vestigial sidebands. Instead, it appears that the Examiner is substituting the method of Court into that of Montgomery and eliminating the most important part of Montgomery, which is using the vestigial sidebands to carry data. This does not make sense technically. Moreover, the Examiner does not say that Court actually teaches putting the signal below a selective voltage level but merely states that Court “implies” reducing the voltage level. “Implies” is not the same as disclosing.

Moreover, it is respectfully submitted that Court is directed to solving a different technical problem than is Montgomery or is the present invention. As specified in Court’s Background of the Invention at col. 1, beginning line 6 “This invention relates to television (TV) secrecy systems, and more particularly to an improvement therein.” This is repeated in the Objects and Summary of the Invention of Court at col. 2, line 16 and under Description of the Preferred Embodiments at col. 3, beginning line 54:

As noted herein before, this invention relates to a system for encoding both the video and audio components of a television channel, that effectively destroys the entertainment value of these video and audio components and thus renders them secure against unauthorized viewing. (emphasis added.)

There is no indication in Court of carriage of data in the television signal. Instead, suppression of the video in Court is to prevent interception and unauthorized use thereof. Hence Court is directed to security of the television signal itself, and not to carrying any data in the television signal. The Court suppression appears to be of the entire television signal rather than only a predetermined part thereof. Therefore, first it is not seen how or why one would combine the Court teaching with that of Montgomery, given that they use different approaches to solve different technical problems, and second even if arguendo they were combined, it is respectfully submitted that the combination still fails to meet, for instance, Claim 3 because there was no

indication in Court of only suppressing a predetermined part of the signal.

Hence the rejection of original Claim 3 (and original Claim 8) is traversed. Note that in the present claim amendments, Claim 3 is amended to be in independent form so as to retain its original subject matter and also to include the language of original base Claim 1. Hence it is respectfully submitted that new Claim 3 is allowable as reciting subject matter which clearly distinguishes over Court, even in combination with Montgomery.

Similarly, Claim 8 has been amended to retain its original subject matter and also to include the language of original base Claim 6. Thereby independent Claim 8 similarly distinguishes over even the combination of Montgomery and Court.

Other Independent Claims

Claim 5 has been amended to be more specific about the predetermined part of the video signal and now recites the subject matter of both dependent original Claims 2 and 3 combined so that the preamble of Claim 5 now recites "the data in a predetermined part of the video signal is not recorded by particular video recorders and is in a blanking interval of the video signal or is below a selected voltage level,". Hence this now recites the subject matter in combination of both original Claims 2 and 3, each of which are allowable as pointed out above, and hence Claim 5 is allowable for at least this reason.

Independent Claim 10 has been amended in its preamble similar to Claim 5 and now recites "the data is encoded into a predetermined portion of the video signal not recorded by particular video recorders and is in a blanking interval of the video signal or is below a selected voltage level." Again Claim 10 distinguishes over even the combination of Court and Montgomery for the reasons discussed immediately above in connection with Claim 5 and hence is allowable.

Therefore, all of the currently pending claims as distinguish over both Montgomery and the suggested combination of Court and Montgomery and hence are allowable.

New Claims 15-18

New Claims 15-18 are directed to an additional feature in accordance with the present invention. Embodiments of the present invention are disclosed wherein the part of the video signal carrying the added data is, for instance, (1) a blanking interval, (2) below a selected voltage level, or (3) above a predetermined frequency, as recited in respectively original Claims 2, 3 and 4. In at least some embodiments, for instance those of original Claims 2 and 3 where the data is in the blanking interval or below a selected voltage level, these may be in baseband video. See the present specification beginning at page 13, line 32:

While the above methods are for the most modifications to the luminance video signal component, they also apply to the chrominance video signal component. The chroma component (e.g. Cr, Cb) are baseband signals just as is the luma component. As such they can be modified or added to in the same ways as can the luma component. (emphasis added.)

Therefore it is clear that in some embodiments the modifications of the video signal are in baseband video. New Claims 15-18 are directed to this feature. Each of Claims 15-18 recites mostly the same language, but they are respectively dependent on independent Claims 1, 5, 6, and 10. For instance, new Claim 15 recites “wherein the predetermined part of the modified signal is baseband video.” These claims are allowable for at least the same reasons as are their base claims.

Therefore, it is respectfully submitted that all of now pending Claims 1, 3-6, and 8-18 distinguish over Montgomery, even in combination with the other cited references, and hence are allowable.

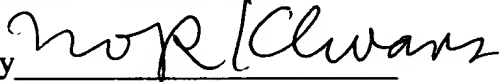
CONCLUSION

In view of the above, all pending claims in this application are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone interview would expedite prosecution, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **136922002300**. However, the Commissioner is not at this time authorized to charge the cost of the issue fee to the Deposit Account.

Dated: April 28, 2004

Respectfully submitted,

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